In The Specification:

Please amend the paragraph page 6, line 12, as follows:

The recessed portions of the shield advantageously allow the compressive layers to be deposited thicker than would otherwise be possible and without creating topography problems for later photolithography processes. Compressive materials such as for example Cu are materials that when formed with a discontinuity tend to expand into the discontinuity rather retract from it as some other materials might do. The inventors have found that such compressive materials, when combined with the magnetostatic properties of a pinned layer, greatly enhance pinning. The inventors have also discovered that the thicker the compressive layer is the greater the assistance to pinning will be. Therefore, the thicker compressive layer allowed by the recessed areas of the shield provide greater pinning assistance than would otherwise ~~other wise~~ be possible.

Please amend the paragraph beginning on page 7, line 9 as follows:

The In the case of a CIP sensor, there will be an insulating layer between the shield and the sensor, and in the case of a CPP ~~CIP~~ or MTJ sensor there will be a conductive layer or no layer at all between the shield and the sensor. Constructing a self pinned sensor having a relatively thick compressive layer at each side of the sensor would cause severe topography above the compressive layer, since the

structure would have to flare upwards severely from each edge of the sensor to accommodate the thicker compressive layer. This will create problems for later lithography processes used to construct the upper shield and the write head, which is generally constructed after the read element. Therefore, constructing the sensor on a shield having a raised portion on which the sensor is constructed and recessed side portions to accommodate the thicker compressive material greatly improves the topography at the top of the structure greatly facilitating later processing steps.

Please amend the paragraph beginning on page 14, line 7 as follows:

Third and fourth compressive layers **351**, **353**, which could be for example Rh, can be provided over the HB layers **347**, **349**, followed by Ta capping layers **355**, **357**. In addition a thin (approximately 20 angstrom) Ta seed layer may be provided under the third and fourth compressive layers **351** ~~**251**~~**, 353**. These additional compressive layers **351**, **353** can provide further pinning assistance for avoiding amplitude flipping. Insulation layer **359**, **361** are provided over the Ta capping layer to ensure that sense current flows only through the MR element **309** as desired.

Please amend the paragraph beginning on page 14, line 15 as follows:

The inventors have found that providing a compressive material **343**, **345** at the sides of the self pinned MR element **309**, greatly increases the switching field that would be required to cause undesirable amplitude flipping. Furthermore, the inventors have found that the greater the thickness of the compressive layers **343**, **345**, the greater this switching field becomes. Whereas magnetic heads are generally constructed with relatively flat bottom leads, such a construction would not allow for thicker compressive layers. In such a case, providing thick compressive layers **343**, **345**, **351**, **353**, would cause the upper shield **323** to flair wildly up at the sides, leading to unacceptable topography for subsequent manufacturing processes. The inventors have included the innovative recesses portions **305**, **307** ~~**339**, **341**~~ in order to provide room for the compressive layers **343**, **345** ~~**333**, **335**~~, **351**, **353** without sacrificing topography. By building the insulation layers **339**, **341** into the recessed portions **305**, **307** of the shield **303** the stabilization structure formed thereon, can be manufactured with increased thickness and in a controllable fashion to the extent that the self-pinning layer can be adequately pinned by the added stress provided.